Pain in Older Adults: Epidemiology, Impact and Barriers to Management

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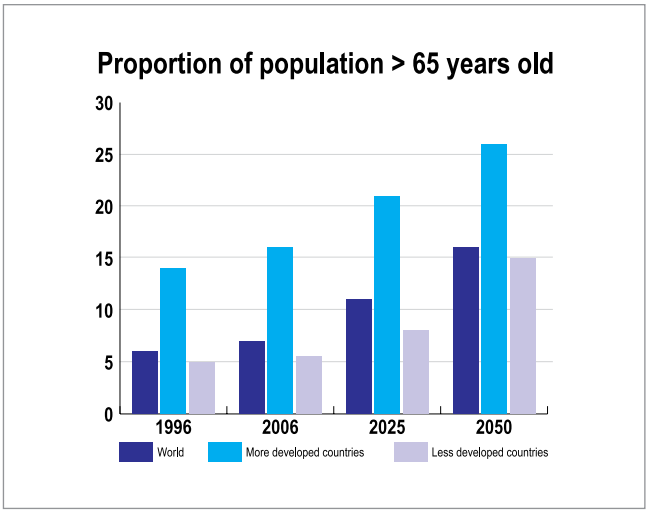
SUMMARY POINTS

- There will be increased numbers of older adults in society in the next few decades.
- Older adults are more likely to have pain problems and other co-morbidities.
- Generally pain is poorly managed in older adults and this becomes worse when cognitive impairment exists.
- The impact of chronic pain on older adults will be greater than that of their younger counterparts in terms of social isolation.
- Attitudes and barriers exist in both the older adults themselves and their younger counterparts.

Epidemiology of Pain

The population is ageing, it is anticipated that the age distribution over 65 years will rise to 36% by 2050 and, with the potential to live longer, it has been suggested that we will see the over 80 age group triple in numbers. With the frequency of pain being reported to be as high as 73% in community dwelling older adults and increasing to 80% of those living in care homes, there is the potential for an ageing pain "time bomb". It is not just chronic pain either; studies demonstrate that acute pain is poorly managed in this group too (1). 67% of cancer deaths occur in those over the age of 65 and with cancer comes pain (2). Other common non-malignant pain conditions seen in older people include osteoarthritis, post herpetic neuralgia, post-stroke pain and diabetic neuropathy.



Mechanisms of Pain

There has been some discussion within the literature as to whether or not there is evidence of physiological changes within pain processing that can be attributed to age (3,4). Certainly, there is evidence that chronic pain is more prevalent in older adults and some suggest that altered physiology of peripheral and central pain mechanisms combined with psychological attitudes, such as stoicism and reluctance to confirm the presence of pain, are all key factors (3). Others take the perspective that pain is present in the same format irrespective of age (5). We should not assume that getting older will increase the risk of being in pain or reduce the ability to cope with pain as significant numbers of elderly people describe minimal suffering and appear to be extremely active. There is no uniform process in ageing and pain. So it may be that we need to consider the psycho-socio-cultural factors in the management of any individual experiencing pain regardless of their age.

Impact of Pain

Poorly relieved pain is an important cause of functional impairment in any age group. With this we see reduced mobility, decreased socialisation, sleep disturbance, slow rehabilitation and consequently increased health care utilisation and costs. However, with older adults such impact precipitates social isolation that can lead to increased symptoms such as depression and increased cognitive impairment (6). A recent review of the literature around the experiences of chronic pain in older adults highlighted the effects of chronic pain on people's daily lives and their ways of adjusting and coping with chronic pain within the community setting (7). Older people in the community adapted

nearly half of their daily activities when experiencing pain, whilst less important tasks would be stopped altogether. Others indicate that older people do not consider their pain to be a great problem; it was the effect pain had on their daily lives that seemed most problematic (8). Furthermore, the qualitative literature suggests that older people link ageing to physical decline and being in pain, therefore they may be reluctant to seek help. This has also been found in the nursing home setting where, because older people believed their pain to be intractable, they often did not complain to staff (7). Some authors describe a process of normalisation where older women learn to 'get on with it' and develop their own management strategies.

Methods of coping include spending time with family and friends and diversional activities, such as reading and watching the television. Rest and other interventions such as heat or 'folk' remedies were also used, with medication only taken as a last resort (9,10). Some older people may prefer self-administered strategies for managing their pain (e.g. massage and informal cognitive coping strategies) with traditional methods such as medication, physiotherapy and exercise least preferred (10). It has been noted that older people appreciate being actively involved in the management of their pain, presumably because this provides them with a sense of control.

Some researchers have taken an approach to capturing the experience of chronic pain for older people within the domain of quality of life. With a variety of research measures such as the Geriatric Depression Scale, SF-36, Sickness Impact Profile and Quality of Life Scale, studies suggest a strong association between chronic pain and poor quality of life (11). For example, the variables of pain, occupational adaptation, depression and difficulty with functioning were found to be inversely related to life satisfaction.

However, by focusing on functional capacity, quality of life variables may be confounded by the effects of other physical disorders associated with older age and not simply attributed to pain. In addition, such studies which narrowly define quality of life in terms of functional capacity may have an inherently youthful bias.

Most researchers have used quantitative methods (7). Whilst such approaches assist in describing the extent and nature of the experience for older people, they lack the capacity to capture a rich understanding of everyday experiences of living with chronic pain. Qualitative research is required to explore the experience of older people with chronic pain resulting from specific conditions (e.g. osteoarthritis, rheumatoid arthritis and neuropathic pain). By listening to older people describe their pain, research may help to challenge widely held beliefs about ageing, physical decline and chronic pain (12).

Why is pain so poorly managed in the older adult?

A number of reasons have been highlighted which seek to explain why pain is poorly managed in older adults compared to their younger counterparts. There is a lack of evidence regarding acceptable treatment for older adults (13) as trials tend to focus upon younger adults and it is acknowledged that older adults are under-represented in pain clinics and pain management programmes (14). Other reasons cited include the fact that pain is assumed to be part of ageing, older adults assume that health care professionals will "know" when they are in pain and of course, with increased age comes the increased likelihood of co-morbidities which can complicate diagnosis and cause unpleasant interactions with medications thus affecting concordance. With increasing age and the potential vulnerability comes the risk of cognitive impairment which can make diagnosis more difficult. A recent qualitative study sought to identify some of the barriers to reporting pain held by residents living in a number of care homes within one district (15). A series of semi-structured interviews were conducted with residents who were mildly / moderate cognitively impaired. The interviews identified a number of key themes as follows:

1. A reluctance to report pain/acceptance that pain is normal and low expectations of help from medical interventions. Many residents when interviewed were in pain, but when asked why they had not reported the pain to the staff, they commented that there was no need to, as there was probably nothing that anyone could do.

2. Fear of chemical/pharmacological interventions. Many of the residents commented that they were fearful of using pharmacological interventions, and they would prefer to manage without, or that nothing seemed to help.

3. Age Related Perceptions of Pain. Not only were the older age group (>80) reluctant to take analgesics, but they were also reluctant to actually admit that they had pain. The residents under 75 years were more willing to voice their pain, and consequently to take analgesic drugs.

Other barriers have been highlighted which are related specifically to the attitudes of the staff (Table).

Table. *Attitudes of staff to pain in elderly people and effects upon management (7,16)*

Attitudes of staff	Effects upon pain management
Belief that older people cannot tolerate opioids	under-prescribing under- administration
Failure to express pain = absence of pain	delaying and withholding of analgesia
Pain perception decreases with age	failure to think beyond the traditional regimens

Pain in Dementia sufferers

Along with the aforementioned barriers and problems, it is estimated that between 22-60% of older adults living in care homes have a degree of cognitive impairment which can significantly impact upon their ability to report pain and their carers' ability to identify pain (17). As the ageing population increases, it is likely that the numbers with dementia will also increase. Adults with dementia will probably express their pain in ways that are quite different from their cognitively intact counterparts which can result in inadequate pain assessment and consequently poor pain management (18).

The processing of sensory-discriminative aspects of pain occur in the lateral pain system, whereas motivational-affective aspects are processed by the medial system. Experimental studies have shown the importance of the recognition of these two systems when dealing with patients with dementia (19). As such it has been demonstrated that pain thresholds (which are the sensory-discriminative aspects) did not differ between patients with Alzheimer's disease and those older adults without dementia, although pain tolerance (motivational-affective aspect) did. This would suggest that older adults with Alzheimer's disease perceive the presence of pain, but that the intensity and affective aspects are different to that experienced by their cognitively intact counterparts. This might explain the atypical behavioural responses observed in this group. However, the research to date has been carried out with experimental pain and most adults in care homes have chronic pain.

Conclusion

The increase in the ageing population that will occur within the next few decades has the potential for an increased incidence of uncontrolled pain in this group. This will impact on the older adult themselves but also has implications for health care. Pain is poorly managed in older adults today and education is needed to counteract the negative attitudes and stereotypes adopted by health workers and the older adults themselves.

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